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(54) STEAM TURBINE ROTOR

and reliability can be increased.

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(57) Abstract:

PURPOSE: To prevent the turbine rotor from producing cracks in such a way that turbine rotor integrated by heterogeneous materials is manufactured to be a divided structure, said turbine rotor is assembled, and formation is made by means of a welding structure.

CONSTITUTION: 12% of chrome steel is used for a turbine rotor 1A, and a padded part 9 is provided at the end part 8. The equivalent material to a separate turbine rotor 1B which is spliced is used at the padded part 9. Low alloy steel is used for the turbine rotor 1B which is spliced. Respective bevel openings 13A, 13B are provided at the splicing ends of the turbine rotors 1A, 1B, butting is done, and splicing is done by means of welding. Since 12% chrome steel which is excellent in the strength and in the toughness at high temperatures, and low alloy steel which is favorable in the bearing characteristics can be applied at proper places, the turbine rotor can be prevented from producing cracks,

